

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013136**Date Inspected:** 27-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 6AE (Traveler Rail Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel at Panel Point (PP) 37, PP 38, PP 39 and PP 40 for Segment 6AE. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 120 RC Set# DHGM220053 and final torque required was 440 N-m and

Bolt sizes used were M22 x 130 RC Set# DHGM220055 and final torque required was 513 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Segment 6BE (Traveler Rail Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel at Panel Point (PP) 41, PP 42 and PP 43 for Segment 6BE. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 120 RC Set# DHGM220053 and final torque required was 440 N-m and

Bolt sizes used were M22 x 130 RC Set# DHGM220055 and final torque required was 513 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

Segment 6CE (Traveler Rail Brackets)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Traveler Rail Brackets to Side Panel at Panel Point (PP) 44, PP 45, PP 46 and PP 47 for Segment 6CE. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M20 x 160 RC Set# DHGM200006 and final torque required was 340 N-m,

Bolt sizes used were M22 x 120 RC Set# DHGM220053 and final torque required was 440 N-m and

Bolt sizes used were M22 x 130 RC Set# DHGM220055 and final torque required was 513 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-578.

Note: Please refer the attached pictures with Tag No. 1 for more comprehensive details.

Segment 6AW (Catwalk Handrail)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Catwalk Handrail to Fiber Plastic Gratings at Panel Point (PP) 37, PP 38, PP 39 and PP 40 for Segment 6AW. Inspected bolts tightness by 12 inch spanner on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M16 x 95 RC Set# DHGM160017.

Note: Catwalk Handrails not installed between PP 36 to PP 37 and at PP 37 to PP 38.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Segment 6BW (Catwalk Handrail)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Catwalk Handrail to Fiber Plastic Gratings at Panel Point (PP) 41, PP 42 and PP 43 for Segment 6BW. Inspected bolts tightness by 12 inch spanner on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M16 x 95 RC Set# DHGM160017.

Segment 6CW (Catwalk Handrail)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Catwalk Handrail to Fiber Plastic Gratings at Panel Point (PP) 44, PP 45, PP 46 and PP 47 for Segment 6AW. Inspected bolts tightness by 12 inch spanner on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M16 x 95 RC Set# DHGM160017.

Note: Catwalk Handrails not installed between PP 45 to PP 46 and at PP 46 to PP 47.

FL3 Area of CB5 (Catwalk Handrail)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Catwalk Handrail to Fiber Plastic Gratings at Panel Point (PP) 38.5 to PP 39 for Cross Beam (CB5). Inspected bolts tightness by 12 inch spanner on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M16 x 95 RC Set# DHGM160017.

FL3 Area of CB6 (Catwalk Handrail)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Catwalk Handrail to Fiber Plastic Gratings at Panel Point (PP) 44.5 to PP 45 for Cross Beam (CB5). Inspected bolts tightness by 12 inch spanner on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00307 Dated March 27, 2010.

Bolt sizes used were M16 x 95 RC Set# DHGM160017.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer